

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14371273

Frame	: 182/4T	Locked rotor time	: 50s (cold) 28s (hot)
Output	: 3 HP (2.2 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 3.21 A	Protection degree	: IP55
L. R. Amperes	: 25.7 A	Cooling method	: IC411 - TEFC
LRC	: 8.0x(Code K)	Mounting	: F-1
No load current	: 1.68 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1760 rpm	Noise level ²	: 56.0 dB(A)
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 1.24 kgfm	Approx. weight ³	: 53.9 kg
Locked rotor torque	: 250 %		
Breakdown torque	: 320 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0117 kgm ²		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	86.2	87.3	88.5	89.5	Max. traction	: 56 kgf
Power Factor	0.35	0.59	0.71	0.77	Max. compression	: 110 kgf

Losses at normative operating points (speed;torque), in percentage of rated output power

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
11.0	8.7	8.3	6.4	4.2	3.2	2.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6307 2RS	6206 2RS
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

Notes

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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LOAD PERFORMANCE CURVE

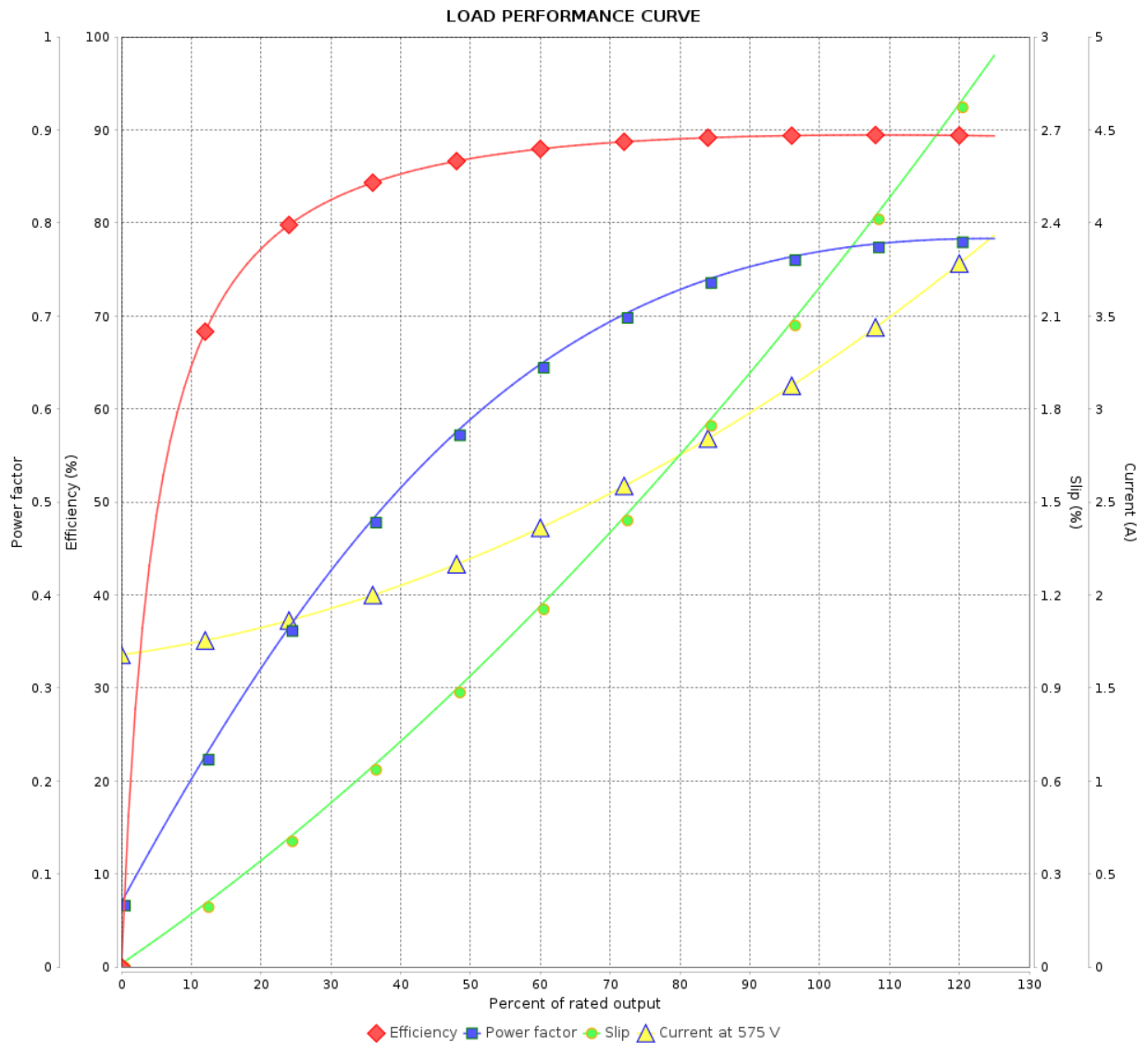
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Customer :

Product line : W21 Explosion Proof NEMA
Premium Efficiency Three-Phase

Product code : 14371273



Performance : 575 V 60 Hz 4P

Rated current : 3.21 A
LRC : 8.0
Rated torque : 1.24 kgfm
Locked rotor torque : 250 %
Breakdown torque : 320 %
Rated speed : 1760 rpm

Moment of inertia (J) : 0.0117 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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